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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,086	08/11/2006	Eihachiro Kato	3749-0113PUS1	9472
2292 7590 03/14/2011 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER BADR, HAMID R				
ART UNIT 1781		PAPER NUMBER		
NOTIFICATION DATE 03/14/2011		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

### Office Action Summary

**Application No.**

10/581,086

**Applicant(s)**

KATO ET AL.

**Examiner**

HAMID R. BADR

**Art Unit**

1781

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Applicants' amendment filed 12/16/2011 is acknowledged.

Rejection of claim 4 under 35 U.S.C. 112 second paragraph is withdrawn per applicants' amendment.

New grounds of rejection is set forth below.

Claims 1-10 are being considered on the merits.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ooike et al. (JP 10-262591; Machine Translation; hereinafter R1) in view of Hesseltine et al. (US 3,243,301; hereinafter R2)

3. R1 discloses a method and the resulting product of fermenting sprouted brown rice using *Aspergillus* mold.

4. R1 discloses that the fermented sprouted brown rice is then used to produce products comprising soybean paste. (Claims, and [0001])

5. R1 clearly discloses that since brown rice is covered with a strong outer skin layer, *Aspergillus* mold can hardly breed (i.e. proliferate). R1 discloses that; when brown rice is used in conventional process wherein the outer skin layer of brown rice is conventionally damaged (i.e. cracked) or exfoliated for the mold hyphae to proliferate,

fungal proliferation is difficult. However, this problem may be solved by sprouting brown rice. [005, 006]

6. R1 discloses the fermentation process of brown rice koji and bean paste. [0016]

7. R1 teaches of the sprouting process for brown rice. [0019] R1 then discloses the process for making fermented brown rice sprouts using *Aspergillus* mold. [0020]

8. While R1 basically discloses the process and the resulting product of the fermentation of sprouted brown rice and soybeans, R1 is silent regarding the use of *Rhizopus* mold in the fermentation process.

9. R2 discloses the details of preparing cereal grain containing varieties of tempeh. R2 discloses employing the highly lipolytic and proteolytic *Rhizopus oligosporus* in the preparation of tempeh containing cereal grains. (col. 2, lines 10-21). R2 discloses that cereal grains include wheat, rye, rice or combination of these grains on their own or mixed with soybean grits. (Col. 1, lines 55-60)

10. R2 discloses that pre-cracking of the cereal grain kernels and a fully hydrated state are required if the mold is to grow extensively and quickly enough to avoid the development of adverse flavor, the expedited growth of the mold is being attributed to the accessibility to the nutrients of the grain below the seed coat. (col. 2, lines 31-37)

11. R2 discloses the preparation of varieties of tempeh from substrates consisting of 3:1 (75:25) to 1:3 (25:75) mixtures of soybeans grits and wheat. (col. 5, Example 3).

Given that R2 teaches of tempeh varieties containing a mixture of soybeans and cereals, the combination of soybeans and sprouted brown rice using the ratios of soybeans to sprouted rice, as presently claimed, would have been obvious.

12. Given that R2 clearly teaches that cracking and full hydration of cereal grains for the fungal proliferation is required, and R1 clearly discloses that the problem of hard seed coat on brown rice can be solved by sprouting, sprouting (germinating) the brown rice would have been motivated and obvious. Consequently, using a sprouted brown rice, the mold mycelia will easily penetrate the grain below the seed coat resulting in expedited growth of the mold. It is also noted that due to lack of amylases in *Rhizopus oligosporus*, the proliferation and growth of fungal hyphae would have been facilitated by sprouting of the cereal grains which brings about activation of amylolytic enzymes in the seeds causing the hydrolysis of starch.

Given that R2 teaches of tempeh varieties containing a mixture of soybeans and cereals, the combination of soybeans and sprouted rice using the ratios of soybeans to sprouted rice, as presently claimed, would have been obvious. The layering of the fermented soybeans and sprouted rice, as presently claimed, is known and practiced in the art.

18. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to make a fermented product using soybeans and sprouted brown rice as disclosed by R1 and replace the mold (i.e. *Aspergillus*) with *Rhizopus* as taught by R2. One would do so to prepare fermented products comprising sprouted cereals e.g. sprouted brown rice. Absent any evidence to contrary and based on the combined teachings of the cited references, there would be a reasonable expectation of success in preparing a fermented product comprising sprouted brown rice and/or sprouted brown rice and soybeans.

***Response to Arguments***

In light of the new grounds of rejection, Applicants' arguments are moot.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAMID R. BADR whose telephone number is (571)270-3455. The examiner can normally be reached on M-F, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hamid R Badr  
Examiner  
Art Unit 1781

/Keith D. Hendricks/

Supervisory Patent Examiner, Art Unit 1781